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CANADIAN CODE OF PREFERRED PACKAGING PRACTICES

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THE CANADIAN COUNCIL OF MINISTERS OF THE ENVIRONMENT (CCME) IS THE MAJOR INTERGOVERNMENTAL FORUM IN CANADA FOR DISCUSSION AND JOINT ACTION ON ENVIRONMENTAL ISSUES OF NATIONAL, INTERNATIONAL AND GLOBAL CONCERN. ENVIRONMENTAL MINISTERS FROM EACH OF THE TEN PROVINCES, THE FEDERAL GOVERNMENT, AND THE TWO TERRITORIES PARTICIPATE IN COUNCIL MEETINGS AT LEAST TWICE A YEAR. THEY DISCUSS ENVIRONMENTAL ISSUES, EXCHANGE INFORMATION, MAKE DECISIONS AND ESTABLISH POLICY FOR WORK TO BE CARRIED OUT UNDER THE AUSPICES OF CCME.

THE PRESIDENCY OF CCME AND OTHER OFFICIAL POSTS ARE ROTATED ANNUALLY AMONG MEMBER GOVERNMENTS.

THIS CODE OF PACKAGING PRACTICES IS INTENDED TO PROMOTE EXCELLENCE IN PACKAGING AS DEFINED BY TWO FUNDAMENTAL AND EQUALLY IMPORTANT PRINCIPLES. PACKAGING MUST HAVE A MINIMUM NEGATIVE IMPACT ON THE ENVIRONMENT WHILE FULLY PRESERVING THE INTEGRITY OF THE PRODUCTS IT CONTAINS. The National Task Force on Packaging, established at the request of the Canadian Council of Ministers of the Environment, has developed a National Packaging Protocol (see Appendix 3). The National Packaging Protocol, fully recognising the responsibility of industry to maintain the integrity of their products, established six policies aimed at minimizing the environmental effects of packaging and at achieving a significant reduction in the amount of packaging sent for disposal. Specific milestone targets were established for diversion of packaging from the waste stream. These targets are: 20% by December 1992; 35% by December 1996, and 50% by December 2000.

The Protocol also states that specific targets will be established for industry sectors, in order to achieve its goals. Industry specific Codes of Preferred Packaging Practices should be developed by those industry sectors.

The means of achieving these goals is clearly identified as a management process based on the Three R's, with *Source Reduction* being the preferred option, followed by *Reuse*, and then by *Recycling*.

Although not specifically mentioned in the Protocol, *Sustainable Development* was the single most important underlying principle leading to the formation of the National Task Force on Packaging, and is fundamental to all decisions regarding packaging. Sustainable Development is a new way of looking at what we do and how we do it. It means integrating the demands of our economy with the ability of our environment to sustain us today and for future generations.

Similarly, the concept of *Product Stewardship*, in which industries assume responsibility for their products and packaging from "cradle to grave" and in which consumers support these initiatives, should also be accepted as a basic principle, vital for the achievement of the goals set out in the Protocol. Recognising that all sectors of society have a responsibility in ensuring that the goals of the Protocol are met, the manufacturers or brand owners must ensure that everything possible has been done to design their packaging according to 3R's principles. In the case of imported products, the distributor must assume this responsibility.

This Code of Preferred Packaging Practices does not represent a guarantee that the goals contained in the National Packaging Protocol will be met, but rather a firm commitment to a process aimed at achieving these goals. It has been adopted by the National Task Force on Packaging and all of its members – representing the various levels of government, the packaging industry (producers, converters and users), and environmental and consumer organizations – are committed to ensuring that the policies and objectives contained in the Protocol will be met in a spirit of voluntary co-operation.

POLICY STATEMENT

THE NATIONAL TASK FORCE ON PACKAGING SUPPORTS AND IS COMMITTED TO THE POLICIES, GOALS AND MILESTONE TARGETS CONTAINED IN THE NATIONAL PACKAGING PROTOCOL. **All packaging will be designed, manufactured, filled, used and disposed of in such a way as to minimise its effect on the environment and to achieve maximum diversion from disposal options through application of the Three R's: Reduce, Reuse, Recycle.**

All industry and trade associations will actively encourage each of their member companies to make a corporate commitment to the policies and milestone targets contained in the Protocol and to prepare an action plan for their achievement. A recommended application of this Code is outlined in Appendices 1 and 2.

GUIDING PRINCIPLES

THE CONTRIBUTIONS THAT PACKAGING HAS MADE TO TODAY'S LIFESTYLES ARE SIGNIFICANT, AND THE DEVELOPMENT OF NEW MATERIALS AND TECHNOLOGIES TOGETHER WITH INNOVATIVE DESIGN WILL ENSURE THAT PACKAGING WILL CONTINUE TO MAKE THESE CONTRIBUTIONS. **There must, however, be a new and strong sense of urgency directed towards the development of packaging which has a minimal effect on the environment, and which can be diverted from the waste stream.**

To this end, all packaging, existing and proposed, will be thoroughly reviewed on a regular basis to ensure that it is consistent with the National Packaging Protocol based on the most current technology and information. The concepts of Sustainable Development and Product Stewardship together with the guiding principles outlined below will form the basis for discussion and change.

FUNCTION

While being environmentally sound, all packaging will maintain the integrity of the product, assure consumer safety and comply with all legal and regulatory requirements.

Packaging has developed into a highly sophisticated medium which allows manufacturers to deliver their products to consumers, often over great distances, with a minimum of damage, spoilage or deterioration. It provides clear information regarding the products it contains, delivers appropriate sales messages and provides the consumer with convenience and the highest degree of safety.

In order to fulfil this role, packaging must perform a number of essential functions, during transportation, storage and use. Included in these functions are:

- Containment of the product to ensure its integrity and safety.
- Protection of the product from physical damage, spoilage and/or deterioration.
- Convenience of use and consumer acceptance.
- The package must satisfy a number of legal and regulatory requirements related to the contents and their safe use as well as provide other information and messages.

It is important that industry continues to assume full responsibility for satisfying these requirements.

THE THREE R'S

In reviewing packaging and identifying opportunities for waste diversion, it should be understood that there is a hierarchy within the Three R's. Source Reduction will be considered first, with elimination, i.e. no packaging, being the most favoured option. Reuse is the second favoured option with recycling third. It is important that the Three R's be considered in this sequence in order to determine the best combination of solutions to achieve maximum diversion in the most cost-efficient manner.

REDUCTION (SOURCE REDUCTION) ***The minimum amount of packaging will be used consistent with functional requirements.***

Materials used in packaging, which have been designated by authorities as having unacceptable toxicological properties, will be eliminated or reduced to acceptable levels within the shortest time frame possible.

Source Reduction may be achieved through many different means including, total elimination, elimination of packaging components, redesign and weight and/or volume reduction and/or redesign of the product itself.

REUSE ***Refillable or reusable packaging will be considered when the preferred options for source reduction have been explored or are not feasible.***

In order to maximise the waste diversion potential, primary reuse is the preferred option. This means that the package will be reused for the purpose for which it was originally intended. If primary reuse is not practical, the potential for the package or package component to be safely reused or refilled by the consumer should be explored.

RECYCLING ***Wherever possible, and to the maximum extent, recycled materials will be used in the production of packaging materials. The use of post-consumer or post-use recycled material, which includes household, institutional, commercial and industrial recycled material, must be strongly encouraged.***

All packaging, to the maximum extent possible, will be recyclable.

A package or packaging material is considered to be recyclable if there are widely available and economically viable collection, processing and marketing systems in place.

Primary or "closed loop" recycling, where the material is recycled into its original material or container form, is the preferred option, provided that all health and other regulatory requirements are fully met. Recycling into some other package form – secondary recycling – is also a desirable option. Recycling into a product other than a package or a packaging material – tertiary recycling – may be the only available option for some materials, and provided that the requirements for recyclability, as defined above, are met, this option should be explored fully.

DISPOSAL

After all opportunities for waste diversion have been identified and implemented, it remains the responsibility of the package user to ensure that any materials which must be disposed of are capable of being disposed of safely and with minimum effect on the environment.

PACKAGING PRACTICES

THE POLICY STATEMENT AND GUIDING PRINCIPLES CONTAINED IN THIS DOCUMENT REFLECT THE COMMITMENT OF THE CANADIAN PACKAGING INDUSTRY (PRODUCERS, CONVERTERS AND USERS) TO SUPPORT THE NATIONAL PACKAGING PROTOCOL. In order to assist individual companies to play their part in implementing the goals contained in the Protocol, the following packaging practices are recommended.

PACKAGING REVIEWS

- ☐ Companies, in conjunction with suppliers, will undertake to carry out regular reviews of their packaging to ensure that it is consistent with the goals of the National Packaging Protocol, based on the most current technology, materials and data available.

MINIMUM LEVELS OF PACKAGING

- ☐ Realistic minimum levels of packaging will be established, supported by product and packaging technical data. Companies will review, on an ongoing basis, what constitutes minimum packaging, recognising that in some areas (for example, for packaging used for the transportation of dangerous goods) there are regulated minimum standards.

DIVERSION TARGETS

- ☐ Following the review, companies will develop in-house waste diversion targets based on the Protocol objectives. Action plans aimed at achieving these targets will also be prepared.

- ☐ In identifying diversion targets, the *Three R's hierarchy* will be used. Identifying opportunities for source reduction will be the first priority followed by reuse and finally recycling. It is important to keep in mind that these options are not mutually exclusive; for example after all reduction options have been explored, every effort will be made to pursue reuse and recycling opportunities.

REDUCTION

- ☐ Priority will be given to elimination of all packaging, followed by the elimination of individual packaging components, such as secondary or tertiary packaging. In order to ensure that a net reduction is achieved, it should be determined whether elimination or reduction of one package component requires the use of additional materials in another component.

- ☐ The package geometry should be evaluated to determine whether lower material area to volume ratios can be achieved. The possibility of replacing two or more smaller packages with a single larger package should be considered.

- ☐ The use of alternative materials, container forms or alternative packaging technology should also be considered as ways to reduce the amount of packaging.

- ☐ The feasibility of redesigning the product so that less packaging is required should be evaluated. (Examples include changes in shape, concentration, more compact products, improved product strength and more performance efficient products, provided that the modified products are environmentally sound).

- ☐ The use of refills made from lighter weight materials should be evaluated.

- ☐ The reuse of package parts should be investigated.

- ☐ The feasibility of package lightweighting should be studied.

- ☐ Alternative distribution systems and their potential for packaging reduction should be evaluated.

- ☐ Any materials in the packaging which are identified as being toxic, i.e. inks, pigments, dyes, etc., used in packaging materials will be eliminated as soon as possible.

REUSE

- ☐ Opportunities for reuse will be evaluated next, making sure that any reuse application does have a measurable effect on waste diversion without incurring a net increase in economic costs, environmental costs and without compromising the health and safety of consumers.

- Priority will be given to using packages or packaging components which are reusable for their original purpose without remanufacturing. For this type of reuse to be viable, it is necessary to have suitable collection, return and reuse programs in place.

- If primary reuse is not practical, determine whether packages or package components can be safely reused or refilled by the consumer.

RECYCLING

- Companies should determine how their packaging can be made recyclable, giving priority to primary or "closed loop" recycling followed by secondary and tertiary recycling. (For a package to be recyclable, there must be widely available and economically viable collection, processing and marketing systems for that material).

- Where such recycling systems do not exist, or are not fully implemented, companies must work with their suppliers, industry associations, government, or waste management and recycling organizations to assist in the establishment of these systems.

- Companies should also determine how recycled materials can be used in packaging materials and containers and at what level.

- If the setting up of new systems is not practical, then consideration should be given to changing to a packaging material which can be recycled through established systems.

- During the design stage of any package, consideration will be given to the suitability of materials for recycling and to the impact that additives, coatings, inks and pigments, adhesives, labels, combinations of materials, convenience features such as tear tapes or carrying handles, etc. may have on the recycling process.

OPERATIONS AND PURCHASING

- Companies will, throughout their entire organization, ensure that their processes and practices are consistent with the policies and objectives contained in the Protocol.

- Companies will, through their purchasing policies, encourage their suppliers to follow manufacturing and packaging practices consistent with these policies and objectives.

RESEARCH & DEVELOPMENT

- Companies and their suppliers will, to the best of their ability and their resources, conduct research and development activities towards the creation of products, processes and packages which will lead to the reduction, reuse and recycling of packaging materials.

INDUSTRY SPECIFIC CODES

Individual companies will prepare industry specific Codes of Preferred Packaging Practices in a co-ordinated manner through their industry associations. These industry specific codes will reflect the policy and guiding principles which appear in this document, as well as identify those key issues appropriate to their particular industry.

ENVIRONMENTAL PROFILES

Companies and industry associations will, in accordance with the National Packaging Protocol and according to the guidelines established by the National Task Force on Packaging, develop environmental profiles in order to identify the environmental impacts of their packaging materials during manufacture, use and post-use.

Based on these profiles, companies will develop action plans to minimize the environmental impacts of their packaging.

COMMUNICATION AND EDUCATION

Comprehensive awareness programs, focused on the consumer and influence groups will be developed individually through government, industry associations and in conjunction with packaging material suppliers so that the public may become better informed regarding the function of packaging and its proper disposition. It is strongly recommended that companies participate with local, regional and national organizations concerned with waste management in order to deal with environmental issues in the most effective manner.

CONTINUOUS IMPROVEMENT

The guiding principles and packaging practices contained in this Code are intended to form the basis for a dynamic process. Products, packaging materials and technologies will change; consumers will become better informed about packaging and more discriminating; the need for waste reduction and resource conservation will not end in the year 2000 but rather increase, and it will therefore be vitally important to strive to seek continuous improvement in packaging as defined in the previous pages.

APPENDIX 1: IMPLEMENTATION

CANADIAN CODE OF PREFERRED PACKAGING PRACTICES FOR INDIVIDUAL COMPANIES

GENERAL POLICY

1. All companies will make an individual commitment to the implementation of the Code throughout their organizations.

2. All companies will adopt a policy statement which identifies their commitment to the Code and the specific actions related to that commitment.

ACTION PLAN

Companies will develop action plans detailing the steps to be taken to implement the Canadian Code of Preferred Packaging Practices throughout their organizations.

The following key activities are recommended in order to assist companies in implementing the Code.

1. Identify all packages produced, used or disposed of by the company:
   (a) Packages from raw materials which are used for the production of manufactured products (cartons, film, bags, cases, pallets, etc.)
   (b) Packages for products manufactured by the company (labels, containers, distribution packaging, transportation packaging, etc.)
   (c) Packages from other products or materials which enter the company (office products, cleaning products, food services, furniture, etc.)
   (d) Other packages such as envelopes and associated packaging materials from internal mail, couriers, etc.

2. Adopt their own code or use their industry specific Code of Packaging Practices which will be used in the design, use and marketing of products and packaging. This code should be consistent with the Canadian Code of Preferred Packaging Practices.

3. Apply the Code within the organization, based on the Three R's hierarchy, i.e:
   (a) Examine source reduction possibilities (elimination, reduction, life extension, bulk packaging, etc.)
   (b) Examine reuse possibilities of packaging.
   (c) Examine recycling possibilities of packaging and possibilities to incorporate recycled content.

4. Involve employees as partners in the implementation process.
   Take the necessary measures to be sure that the Code and/or its principles are well understood by all employees and applied at all levels in the organization (reception of goods, manufacturing, maintenance, marketing, shipping, consumption of other goods such as food, etc.)

5. Keep records of all actions and results within the organization relating to packaging waste. Be sure that all the actions are identified and documented to ensure that the results can be used to demonstrate the success in the implementation of their codes and in reaching the Protocol objectives.

PREFERRED PACKAGING PRACTICES

This questionnaire, which has been adapted from guidelines developed by the Institute of Packaging Professionals, is included as an appendix to the Canadian Code of Preferred Packaging Practices, to help companies evaluate options to minimize the impact of their packaging on the environment. As many products require special treatment, there are no right or wrong answers. All functions of the packaging must be considered, as well as the total lifetime environmental impact. While a package's environmental impact is a significant component of the package structural design/evaluation process, the integrity of the product must never be compromised. The final design of a package must attempt to consider the needs of the environment, the manufacturer, the package user and the final consumer.

HOW TO USE THE QUESTIONNAIRE

These questions have been developed to help companies consider environmental implications during package design. There are no formulae presented to judge the environmental quality of the package. Rather, questions are presented to help a packager address environmental impact as related to their particular packaging situations.

The questions are classified into three main sections: source reduction; reuse/recycling/composting*; disposal. Each section contains information to guide the packager through the design and evaluation process. All sections should receive separate attention, but the impact of one design decision on the total packaging system must be continuously considered. For example, if lightweighting the primary package results in more secondary or tertiary packaging, breakage or spoilage, lightweighting may not be the right approach.

It should be noted that for every answer that suggests a negative effect on the environment, there should be concrete reasons why the package causes this effect. These should be reviewed to determine if the negative impact is unavoidable, or if changes can be made to lessen or remove it.

These questions are general in nature and packagers may find that some sections will need to be tailored to fit specific situations.

SOURCE REDUCTION

Source reduction is an ongoing materials and energy conservation process to reduce manufacturing, internal and post-use solid waste by developing a wide variety of functional systems and techniques that minimize the use of materials and energy resources.

Of all the environmental considerations packagers must evaluate, none more directly affects municipal solid waste than source reduction. This is a high priority option.

* *Composting, although not covered in the Canadian Code of Preferred Packaging Practices, can result in diversion from waste, but it should be considered as an option only after all other 3R's options have been exhausted.*

AMONG QUESTIONS PACKAGING PROFESSIONALS SHOULD ASK ARE:

1. Can the package or any of its components, such as secondary or tertiary packaging be eliminated entirely (i.e. does the product really need an individual package or can it be sold as is, or in bulk)?

   Can the package be eliminated? ☐Y ☐N

   Can a component of the package be eliminated? ☐Y ☐N

   Can neither the package nor any of its components be eliminated? ☐Y ☐N

2a. Can source reduction goals be achieved by packaging geometry or structural design changes (e.g. lower packaging surface area to product volume ratios)? ☐Y ☐N

2b. Can overall packaging volume be reduced by using different packaging materials or container forms or by the use of new package or product technology? ☐Y ☐N

3a. Does a reduction in materials in one part of the package system require as much or more materials to be used in another part of the system? ☐Y ☐N

3b. Is it possible to eliminate secondary or tertiary packaging by increasing primary packaging? ☐Y ☐N

3c. Is it possible to reduce primary packaging through changes to secondary or tertiary packaging to achieve a net overall reduction? ☐Y ☐N

4a. Can a product or its design be changed to reduce the amount of packaging (e.g. change in shape, liquid concentrates, improved product strength)? ☐Y ☐N

4b. Can the use of different materials, container forms or different packaging technology be considered as ways to reduce the amount of packaging? ☐Y ☐N

5. Can source reduction goals be met by replacing a number of smaller packages with a single larger, more efficient package size (e.g. family-size or bulk containers rather than individual portion packages)? ☐Y ☐N

6. Do you solicit customer suggestions on source reduction possibilities for secondary and tertiary packaging throughout the distribution system? ☐Y ☐N

7. Does a product or package change which results in source reduction cause an increase in solid waste in other areas (e.g. an increase in the amount of manufactured scrap materials)? ☐Y ☐N

8. Can source reduction be achieved by changing the distribution process or transportation modes? ..... ☐Y ☐N

9. Can product be made available in lightweight, smaller or concentrated refills to permit reuse of the original container? ..... ☐Y ☐N

10. Are any toxic materials used in the manufacture of packaging materials? Can they be eliminated or reduced to the minimum level possible (e.g. the use of heavy metals in some printing inks poses a health threat during the manufacture, use and disposal of these inks, including the disposal of packaging to which they may be applied)? .... ☐Y ☐N

REUSE/RECYCLING/COMPOSTING

Reuse, recycling and composting are post-use actions to result in reduced disposal of used packaging materials to municipal solid waste and are desirable alternatives for reducing the environmental impact of the package.

The use of technically recyclable materials is not an acceptable means of reducing environmental impacts unless there are widely available and economically viable collection, processing and marketing systems for that material. If there is no such system in place, but the technology and market exist to have one, then all parties involved should work together to develop such a system.

11a. Can the package or one of its components be designed to be safely refilled or reused by the consumer? ..... ☐Y ☐N

11b. If not, is the necessary research being conducted to develop this technology, either alone or in conjunction with industry, government or academia? ..... ☐Y ☐N

12a. Is the package or one of its components reusable for the same purpose without remanufacturing? ..... ☐Y ☐N

12b. Is there a suitable system in place to collect, return and reuse these used packages? ☐Y ☐N

12c. Does this system permit the consumer to retain ownership of the package? ..... ☐Y ☐N

12d. If not, is there active development for such a system? ..... ☐Y ☐N

12e. If primary reuse is not practical, can the package or one of its components be safely reused directly by the consumer for other purposes than its original one? ..... ☐Y ☐N

13a. Does the technology exist to collect packaging from consumers for commercial recycling? ☐Y ☐N

13b. Could recycling be achieved through new technologies (e.g. tri-layered polyethylene bottles)? ☐Y ☐N

13c. Is the necessary research being conducted to develop these technologies and systems? ☐Y ☐N

14a. Is the package recyclable (i.e. is there a viable system in place to recycle the package)? ☐Y ☐N

14b. If so, are symbols or instructions (meeting the guidelines for environmental labelling and advertising) used on the package to encourage recycling? ☐Y ☐N

14c. Can the package be redesigned to make it more recyclable (e.g. elimination of unnecessary double or multi layers)? ☐Y ☐N

15a. Has an in-house or in-plant resource recovery or recycling system to use waste products generated from the manufacturer of your product or package been established?

Into the same product ☐Y ☐N

Recycled into a secondary product or single material ☐Y ☐N

Recycled into a secondary product or co-mingled material ☐Y ☐N

Materials must be reclaimed by a chemical or other process ☐Y ☐N

The material is sold or given to an outside vendor to be recycled ☐Y ☐N

15b. If not, is there an active development of such a system? ☐Y ☐N

16a. Is the outer and inner packaging used for shipment and distribution of goods recyclable? ☐Y ☐N

16b. Has a resource recovery and recycling system been established in cooperation with customers to collect and reuse distribution packaging waste that does not reach the ultimate customer? ☐Y ☐N

16c. If not, is there active development of such a system? ☐Y ☐N

17a. Are programs in place to require reusable or recyclable secondary packaging from suppliers? ☐Y ☐N

17b. If not, is there active development of such programs? ☐Y ☐N

18. Are recycling systems established for the packaging material in all the regions in which the package will be sold or distributed? ☐Y ☐N

19a. Is there a viable commercial market for these post-consumer, recycled packaging materials? ☐Y ☐N

19b. If not, are any projects or programs to increase demand for this recycled material being initiated – either alone or in conjunction with industry, government or academia? ☐Y ☐N

20. Are the materials suitable for recycling? (e.g. the impact that additives, coatings, inks & pigments, adhesives, labels, combinations of multi-materials, convenience features such as tear tapes or carrying handles, etc., have an impact on the recycling process) ☐Y ☐N

21a. Is a package mono-material or multi-material?

Mono-material ☐Y ☐N

Multi-material ☐Y ☐N

21b. If the package is multi-material:

Is this combination of materials the most environmentally sound structural design possible without compromising product integrity? ☐Y ☐N

Are current recycling systems set up to handle these multi-material packages? ☐Y ☐N

If there is not a recycling system in place to process the multi-material package, is your company pursuing the development of such a system, either alone or in conjunction with industry, government, the recycling industry, or academia? ☐Y ☐N

Do the materials need to be further separated to increase their recycling value or to avoid impeding the recycling process? ☐Y ☐N

22a. Does the primary, secondary and/or tertiary package currently use recycled material? ☐Y ☐N

22b. If so, is there a symbol and statement on the package to indicate what industrial, post use recycled material has been used and in what proportion? ☐Y ☐N

23a. Have the physical properties of the package (stacking strength, printing quality, etc.) been thoroughly questioned to permit the use of recycled materials? ..... ☐Y ☐N

23b. Did you evaluate the levels and availability of recycled materials which maintain an acceptable level of package performance? ..... ☐Y ☐N

23c. Have your manufacturing/production processes been researched or modified to allow the use of recycled materials? ..... ☐Y ☐N

24a. Is the package compostible as an alternative to recyclable? ..... ☐Y ☐N

24b. If the package is compostible, do available composting infrastructures exist to ensure the proper disposal of the product or package? ..... ☐Y ☐N

DISPOSAL

When a package finally reaches the end of its life cycle and can no longer be reused or recycled due to technical reasons, or lack of recycling facilities, it must be capable of proper disposal. The package should be designed to facilitate its safe and, if possible, easy disposal. This may require instructions on the proper disposal method. Cooperation between industry and governments must be pursued to ensure that proper disposal is achieved.

25. Can the package or packaging materials be handled by energy recovery systems without harmful ash residues or emissions? ..... ☐Y ☐N

26a. Has the package and its components (e.g. inks, dyes, pigments, stabilizers, solders and adhesives) been made without the inclusion of toxic materials such as heavy metals? ..... ☐Y ☐N

26b. If the package material currently uses toxic materials, can these be eliminated without compromising the package's function? ..... ☐Y ☐N

27a. Can the package be landfilled safely without leaching hazardous by-products or otherwise causing harm to the environment? ..... ☐Y ☐N

27b. If no, can the package be designed to avoid problems in landfill disposal? ..... ☐Y ☐N

27c. If no, have you identified the needed research to avoid those problems? ..... ☐Y ☐N

28. Can the package be made smaller and/or designed to be compacted by consumers or waste management companies so that it takes up less collection/landfill space? ..... ☐Y ☐N

THE NATIONAL PACKAGING PROTOCOL
(FROM GOVERNMENT PUBLICATION NUMBER: CCME-TS/WM-FS 020)

INTRODUCTION

In April 1989, the then Canadian Council of Resource and Environment Ministers (CCREM) – now the Canadian Council of Ministers of the Environment (CCME) – stated:

"Waste management is an urgent and pressing national problem. Some jurisdictions are already running out of landfill sites, in part because Canada is one of the most wasteful nations. For this purpose, Ministers have instructed the Waste Management Committee of CCREM to develop a packaging policy for Canada within a broad review of solid waste management opportunities including government purchasing and recycling policies. It was agreed that targets and schedules for waste minimization be established, including a fifty percent (50%) reduction in waste generation by the year 2000."

Canada is a country rich in natural and human resources. A country able to respond to an environmental imperative, and to provide international leadership through the better management of packaging. This document – The National Packaging Protocol (NAPP) – recommends six packaging policies for Canada.

The National Packaging Protocol includes the targets to be achieved, relevant background to the development of the Protocol, six policies and the key actions and schedules required to realize them.

In this document, a package is defined as "a material or item that is used to protect, contain, or transport a commodity or product. A package can also be a material or item that is physically attached to a product or its container for the purpose of marketing the product or communicating information about the product."

In this document, packaging can refer to not only the package itself but also to its design, manufacture, use and post-use management.

BACKGROUND

The per capita consumption of packaging in Canada amounts to an estimated one (1) tonne of packaging per family per year. Packaging performs a variety of valuable social uses including the prevention of spoilage and the protection of safety and health. In the order of eighty percent (80%) of the packaging used in Canada is managed through disposal – either to landfill or incinerators.

THE DISPOSAL OF PACKAGING:

- ☐ **represents a loss of natural resources;**
- ☐ **requires increasing financial expenditures to deal with materials not fully utilized;**
- ☐ **consumes valuable land in order to establish disposal sites;**
- ☐ **creates various pollutants which may impact on surface or groundwater resources and the atmosphere;**
- ☐ **threatens wildlife and causes aesthetic unsightliness when discarded as litter; and,**
- ☐ **leaves to our children a legacy of environmental degradation.**

IN MAY 1989, THE CCME COMMISSIONED A NATIONAL TASK FORCE ON PACKAGING TO DEVELOP NATIONAL POLICIES FOR THE MANAGEMENT OF PACKAGING. The Task Force, composed of stakeholder representatives from across the country, agreed on a set of guiding principles from which to develop a National Packaging Protocol. It was agreed the Protocol would focus on industrial, commercial and household packaging, and would be developed in consultation with key stakeholders from the federal, provincial/territorial and municipal governments, industry, environmental and consumer groups.

The Task Force focused on the management of packaging through source reduction, reuse and recycling. It did not consider disposal options such as incineration. Also not included within the scope of this work was the effect an intended disposal technique (e.g. incineration or landfill) has on package design.

SINCE IT FIRST CONVENED IN JUNE 1989, THE NATIONAL TASK FORCE ON PACKAGING HAS:

- prepared a technical data base on the management of packaging; and
- conducted a Canada-wide consultation program to involve stakeholders from across the country in the development of the policies, and to ensure regional input

CONCURRENT WITH DEVELOPMENT OF THE PROTOCOL, THE TASK FORCE COMMISSIONED TECHNICAL REPORTS ENTITLED:

- The Technical Basis for the National Packaging Protocol: Summary Report;
- Household Consumers and Packaging;
- Packaging Application in Canada;
- Packaging Reduction, Reuse and Recycling Technology Options & Economics;
- Environmental Life Cycle of Packaging;
- Economic Considerations in the Development of the National Packaging Protocol;
- Legislative Initiatives Relating to Packaging and Implications for the National Packaging Protocol;
- Stakeholder Positions and Response to the Development of the National Packaging Protocol;
- Agenda for Action for the National Packaging Protocol.

The result of these activities are six recommended packaging policies for Canada: ***The National Packaging Protocol.***

POLICY ONE ALL PACKAGING SHALL HAVE MINIMAL EFFECTS ON THE ENVIRONMENT The environmental impact of packaging extends beyond the effect of its disposal – quantity of waste is not the only issue. Resources and energy are consumed to produce and transport packaging. Consideration of broader environmental consequences should be included in an assessment of the impact of packaging.

This will be achieved through the preparation of environmental profiles for each type of package, to be followed by product re-design which minimizes adverse environmental impacts. The policy will stimulate research and the development of new packaging products which have minimal effects on the environment.

ACTIONS:

- ☐ The federal government, in consultation with a multi-stakeholder group, will undertake the development of methodologies and guidelines to be used in conducting environmental profiles of packaging, allowing users to compare packaging choices.
- ☐ Industry will undertake environmental profiles of their packaging in accordance with the above federal government guidelines to identify the environmental impacts generated through the manufacture, use and post-use management of their packaging.
- ☐ Based on profile outcomes, industry will prepare action plans and schedules to minimize environmental impacts and manage packaging through source reduction, reuse and recycling approaches.
- ☐ A multi-stakeholder group will be established to:
  (a) identify research and development initiatives and priorities; and
  (b) identify new business opportunities.
- ☐ Government will work with industry to identify and demonstrate new technologies which minimize the environmental impacts of packaging.

POLICY TWO PRIORITY WILL BE GIVEN TO THE MANAGEMENT OF PACKAGING THROUGH SOURCE REDUCTION, REUSE AND RECYCLING In keeping with a policy which minimizes the environmental impacts of packaging, action will be taken to manage packaging following the hierarchy of source reduction, reuse and recycling.

ACTIONS:

- ☐ The federal government, in consultation with industry and the multi-stakeholder group, will establish a "Code of Preferred Canadian Packaging Practices" to guide industry in the design of products and the selection and design of packaging. In the development of the code, consideration will be given to the following hierarchy:
  (a) No packaging
  (b) Minimal packaging
  (c) Reusable packaging
  (d) Recyclable packaging and packaging containing recyclable material

- ☐ National minimum content standards will be developed by the federal government, in consultation with the multi-stakeholder group, for the inclusion of secondary/post-consumer material in packaging, recognizing health, safety, packaging product performance requirements, and regional limitations.
- ☐ Provincial and municipal governments, together with appropriate industry, will develop the infrastructure of their choice to collect and market packaging materials for reuse and recycling in order to achieve the targets of these national packaging policies.
- ☐ Industry/government partnerships will be formed to develop new and expanded markets for recycled packaging material.

POLICY THREE A CONTINUING CAMPAIGN OF INFORMATION AND EDUCATION WILL BE UNDERTAKEN TO MAKE ALL CANADIANS AWARE OF THE FUNCTION AND ENVIRONMENTAL IMPACTS OF PACKAGING Responsibility for the management of packaging is a shared one. Achievement of these national packaging policy targets require the combined resources of government, industry, consumer and special interest groups. Education programs are necessary to both inform and motivate purchasers to make appropriate choices, and to support the development of a conserver society.

ACTIONS:

- ☐ Provincial governments will develop, with the multi-stakeholder group, education programs for use in schools.
- ☐ A national program will be developed by the multi-stakeholder group, to inform all Canadians of the functions and environmental impacts of packaging and to encourage environmentally sound purchasing practices.

POLICY FOUR THESE POLICIES WILL APPLY TO ALL PACKAGING USED IN CANADA, INCLUDING IMPORTS It is important that these national packaging policies be applied to all packaging, both domestic and imported. Regardless of its country of origin, all packaging used in Canada has the potential to require management in this country. This policy will ensure a "level playing field", preventing any product from gaining a competitive advantage at the expense of the environment. Efforts must be undertaken to ensure effective monitoring of border markets against entry of non-complying products.

ACTIONS:

- ☐ The federal, provincial and municipal governments will, with sensitivity to the needs of local industries, establish standards and regulations to apply these policies to all packaging used in Canada, including imports.
- ☐ The federal government will act as a liaison with other countries to promote the policies contained within this Protocol in relation to international trade.

POLICY FIVE REGULATIONS WILL BE IMPLEMENTED AS NECESSARY TO ACHIEVE COMPLIANCE WITH THESE POLICIES Monitoring the progress achieved through voluntary initiatives may indicate a need for regulatory measures to ensure that the effects of these policies are felt equally, and the targets are met.

ACTION:

- ☐ Federal and provincial governments will, with the participation of the multi-stakeholder group, enact regulations which are compatible across Canada, which specify performance requirements, targets and deadlines for achievement consistent with these policies.

POLICY SIX ALL GOVERNMENT POLICIES AND PRACTICES AFFECTING PACKAGING WILL BE CONSISTENT WITH THESE NATIONAL POLICIES In environmental and other public policy areas, existing and new government policies will be reviewed to ensure consistency with these national packaging policies. Health, safety, technical and other factors will need to be assessed in order to identify conflicts or barriers to the achievement of the objectives in these policies.

ACTIONS:

- ☐ Government policies and practices which impede achievement of the objectives of these packaging policies will be identified and where possible removed or modified.
- ☐ Government policies and practices such as procurement will be developed and implemented to support the achievement of the objectives of these policies.

MILESTONE TARGETS

BY DECEMBER 31, 1990

- ☐ All provinces must have in place a nationally coordinated data collection program to make possible the monitoring of the following targets.

BY DECEMBER 31, 1992

- ☐ Packaging sent for disposal will be no more than eighty percent (80%) of the amount sent in 1988.

BY DECEMBER 31, 1996

- ☐ Packaging sent for disposal will be no more than sixty five percent (65%) of the amount sent in 1988.

BY DECEMBER 31, 2000

- ☐ Packaging sent for disposal will be no more than fifty percent (50%) of the amount sent in 1988.

Fifty percent (50%) of these diversions shall be achieved through new source reduction and new reuse initiatives. Recycling programs shall make up the remainder of these diversions

- Percentage goals will be reviewed annually.
- These targets are set as cumulative national goals. In some provinces, the initial target may be higher to correspond to provincial waste management goals. A regulatory framework must be in place to be implemented quickly in the event that targets are not met.
- Specific targets will be established for industry sectors in order to achieve these goals. It is incumbent upon those industry sectors unable to meet these requirements to provide adequate documentation and alternative targets one year in advance of the prescribed deadline.
- Objectives and actions will be reviewed and enhanced during and beyond this time frame to achieve further diversion.

Diversion targets to be measured by weight. Recycling programs include commercial, industrial, institutional and municipal initiatives.

IMPLEMENTATION

ONE **The Canadian Council of Ministers of the Environment will monitor the implementation and effectiveness of these policies.**

Monitoring is essential to determine the effectiveness of these policies in contributing to the overall goal of reducing waste by fifty percent (50%) by the year 2000.

Monitoring will provide a basis for modifying these policies as necessary, and informing the public of progress.

ACTION:

- **A multi-stakeholder group will be established to adopt a plan of action, develop a monitoring mechanism, track progress and prepare an annual report recommending plan modifications and target revisions.**

TWO **The Canadian Council of Ministers of the Environment will determine the appropriate funding mechanism for the responsibilities of the multi-stakeholder group; other initiatives will be funded by appropriate governments and industry.**

Stakeholders will ensure those objectives for which they are responsible are met. Each will identify appropriate means of financing those responsibilities. The multi-stakeholder group will have joint responsibilities related to all stakeholders.

ACTIONS:

- **The Canadian Council of Ministers of the Environment should consider a variety of funding options for multi-stakeholder activities. Among these could be:**
  (a) charges for waste sent for disposal;
  (b) industry contributions;
  (c) federal and provincial funding.

CANADA'S NATIONAL PACKAGING PROTOCOL IS THE RESULT OF EXTENSIVE CONSULTATION WITH INDUSTRY, GOVERNMENT, CONSUMER AND ENVIRONMENTAL GROUP REPRESENTATIVES ACROSS CANADA. THE ORIGINAL MEMBERS OF THE NATIONAL TASK FORCE ON PACKAGING AT THAT TIME WERE:

Walter Bilawich
Government of the Yukon

Drew Blackwell
Federation of
Canadian Municipalities

G.W. Brown
Newfoundland Environment

Tim Carter
Canadian Council of
Grocery Distributors

Adam Ciulini
Ontario Ministry
of the Environment

Larry Dworkin
Packaging Association
of Canada

Dr. Fred Edgecombe
Charmian Entine
Society of the Plastics
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Don Elsaesser
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G.W. Brown
Newfoundland Environment

Tim Carter
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Alan Robinson
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Dr. Fred Edgecombe
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Canadian Tinplate Recycling Council

John Jackson
Citizen's Network on Waste Management

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Nova Scotia Environment

Lois Corbett
Ecology Action Centre

Zen Makuch
Canadian Environmental Law Association

Gerry Stewart
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Agriculture Canada

Dave Thompson
Manitoba Environment

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Resource Systems Management International

MWR & Associates

The Coopers & Lybrand Consulting Group

Recycling Development Corporation

VHB Research and Consulting Inc.

M.J. Ramsey + associates inc.

The National Packaging Protocol was endorsed by The Canadian Council of Ministers of the Environment at their meeting held in Vancouver, B.C., Canada, March 20, 1990.